

REMARKS

Claims 1, 3 to 7, 9 to 16 are pending in the application; claims 2 and 8 are canceled; new claims 15 and 16 have been added.

Claim Rejections - 35 U.S.C. 112

Claim 2 stands rejected under 35 U.S.C. 112, 2nd paragraph, 2nd paragraph. Claim 2 has been canceled:

Rejection under 35 U.S.C. 102

Claims 1, 2, 4-8, 10, 11 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Poe et al.* (US 2,256,479).

Poe et al. does not show a rotor that is adapted to be fixedly mounted on a camshaft for effecting an adjustment of the camshaft relative to a crankshaft. The rotor of the cited reference is part of a hydraulic shock absorber. Moreover, the special configuration of the rotor vanes (disclosed in original claim 8) as claimed in amended claim 1 is not disclosed. Even though the vanes 18 of *Poe et al.* show a somewhat widened section at the end face, the width of the widened section at the end face is not 1.5 to 3 times the width of the radially inwardly positioned section of the rotor vane that connects the widened section to the base member. Therefore, claim 1 is not anticipated.

Also, it would not be obvious to enlarge the width of the widened section because this would restrict the rotation angle of the rotor vanes relative to the abutment walls and would reduce the efficiency of the shock absorbing device.

As set forth in the instant application, the goal of the invention is to improve an oscillating motor in such a way that the leakage losses are at least kept at a minimum and that the oscillating motor enables a reliable adjustment of the camshaft over its service life (see paragraph 0005 of the instant specification). The feature of original claim 8 - the widened section has a width at the end face that is 1.5 to 3 times the width of the radially inwardly positioned section - is important in regard to this aspect of the invention because the great width of the radially outer section of the rotor vane increases the gap length between the end face of the rotor vane and the inner wall of the stator. However, the oscillating angle of the rotor relative to the stator is not reduced for a predetermined size of the motor because widening of the rotor vane is discontinuous across its length. This

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enlargement at the rotor vane end improves and optimizes the sealing action between the two pressure chambers so that the oscillating motor according to the invention has only minimal leakage. The proper function of the camshaft adjusting device is thus improved. See paragraph 0007 of the instant application.

Claims 1-5 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Folland et al.* (US 5,201,637).

Claim 1 has been amended to include the features of claim 8 so that the above rejection no longer applies.

Claims 1, 2, 4, 5, 6, 9, 10, 12, 13 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Sneen* (US 3,032,020).

Claim 1 has been amended to include the features of claim 8 so that the above rejection no longer applies.

Claims 1, 2, 4, 5, 6, 10, 12, 13 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Andersen* (US 2,339,042).

The examiner states that *Anderson* shows a rotor 14 with rotor vanes 16 and a stator 20 with stator vanes 24. As stated in lines 20 to 34 of the right-hand column of page 1 of *Anderson*, the member 14 with outwardly projecting vanes 16 is attached to the fixed member 10 and the vanes 16 constitute fixed abutments for the motor; the outer member 20 is rotatable. Therefore, the cited reference does not show a stator having radially inwardly extending stator vanes connected to the inner wall and does not show a rotor having radially outwardly extending rotor vanes connected to the base member of the rotor. The cited reference also does not show a rotor adapted to be fixedly mounted on a camshaft for effecting a camshaft adjustment of the camshaft relative to a crankshaft. Moreover claim 1 has been amended to include the features of claim 8.

Claim 1 and its dependent claims are therefore not anticipated by *Andersen*.

Rejection under 35 U.S.C. 103

Claims 1-6 and 12-14 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over *Ludwig et al.* (US 2,902,009) and *Peo et al.* (US 2,256,470).

Claim 1 has been amended to include the features of claim 8 so that the above rejection no longer applies.

New Claims 15 and 16

In addition to defining the rotor as being adapted to be fixedly mounted on a camshaft for effecting an adjustment of the camshaft relative to a crankshaft, claim 15 defines the rotor vanes in detail: the rotor vanes each have a widened section at the end face, wherein the widened section extends across at least one third to approximately one half of a radial length of the rotor vanes, respectively (disclosed in original claim 3 and in paragraph 0023 of the specification); the rotor vanes each have a radially inwardly positioned section connecting the widened section to the base member, respectively (see drawings; see paragraph 0023); the radially inwardly positioned section has substantially a constant width across a length of the radially inwardly positioned section (claim 11); the widened section has a width at the end face matching approximately 1.5 to 3 times a width of the radially inwardly positioned section (claim 8).

None of the cited references shows the combination of these features. *Folland*, *Sneen* and *Ludwig et al.* show rotor vanes that taper essentially continuously from the end face toward the base member. *Anderson* does not show rotor vanes extending radially outwardly from a base member. *Poe et al.* has a widened section that extends only about one sixth of the radial length of the rotor vane and the width of the widened section is much less than 1.5 to 3 times the width of the radially inwardly positioned section.

Claim 15 is therefore believed to be allowable.

In addition to defining the rotor as being adapted to be fixedly mounted on a camshaft for effecting an adjustment of the camshaft relative to a crankshaft, claim 16 defines that the radially inwardly positioned section of the rotor vanes has substantially a constant width across a length of the radially inwardly positioned section and that the widened section of the rotor vanes has a width at the end face matching approximately 1.5 to 3 times a width of the radially inwardly positioned section (disclosed in original claims 8 and 11).

None of the cited references shows the combination of these features. *Folland*, *Sneen* and *Ludwig et al.* show rotor vanes that taper essentially continuously from the end toward the base member. *Anderson* does not show rotor vanes extending radially outwardly from a base member. *Poe et al.* has a widened section having a width that is

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much less than 1.5 to 3 times the width of the radially inwardly positioned section.

Reference is being had to the above discussion of the special importance of the features of original claim 8 in regard to the 35 USC 102 rejection in view of *Poe et al.*

Claims 15 and 16 are therefore believed to be allowable.


CONCLUSION

In view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Should the Examiner have any further objections or suggestions, the undersigned would appreciate a phone call or e-mail from the examiner to discuss appropriate amendments to place the application into condition for allowance.

Authorization is herewith given to charge any fees or any shortages in any fees required during prosecution of this application and not paid by other means to Patent and Trademark Office deposit account 50-1199.

Respectfully submitted on August 12, 2005,


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